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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,315	09/08/2003	Volker Muller	A-3741	1206
24131	7590	08/05/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			FUNK, STEPHEN R	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/657,315	Applicant(s) MULLER ET AL. 	
	Examiner Stephen R Funk	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12, 13 and 16-23 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2854

The disclosure is objected to because of the following informalities: On page 5 lines 25 - 26, and throughout the specification and claims, "positionable locally fixed" is grammatically awkward. On page 27 line 15 "first" should be --second--. On page 29 line 18 "second drive 14" should presumably be --first drive 42--. Appropriate correction is required.

Claims 1 - 22 are objected to because of the following informalities:

In claim 1 penultimate line "said", first occurrence, should be deleted as being repetitive.

In claim 3 lines 2 - 3 and claim 14 line 2, "positionable locally fixed" is grammatically awkward.

In claim 21 line 3 and claim 22 line 3 "grippers" should be --grippers--.

Appropriate correction is required.

Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is dependent upon itself.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "alternatingly offset" grippers and gripper pads recited in claim 21 and the grippers and gripper pads of an upstream cylinder being movable "relative to" the grippers and gripper pads of a downstream cylinder recited in claim 22 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes

Art Unit: 2854

made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 19 - 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

First, in claims 19 and 20 the gripper pad being *lowered* by the second drive during closure of the gripper is not adequately supported by the disclosure. See page 9 lines 4 - 13 and possibly page 19 lines 9 - 20 in the specification. Since the remainder of the disclosure focuses on raising the gripper pad (12) by the second drive (14) during closure, it is not entirely clear how *lowering* the gripper pad during closure effectively grips the sheet during closure. There is no detailed discussion in the specification to harmonize these two opposite motions of the gripper pad.

Second, in claim 21 it is not clear how the grippers and gripper pads along one row are "alternatingly offset" relative to one another. See page 9 lines 15 - 23 and page 33 lines 10 - 25 in the specification. In lack of any detailed description in the specification or illustration in the drawings it cannot be accurately determined how the grippers and gripper pads are alternatingly offset relative to one another.

*Due to the lack of proper support in the disclosure, claim 21 cannot be examined relative to the prior art at this time.

Art Unit: 2854

Third, in claim 22 it is not clear how the grippers and gripper pads of an upstream cylinder are movable “relative to” the grippers and gripper pads of a downstream cylinder. See page 9 line 25 - page 10 line 12 and page 34 in the specification. In lack of any detailed description in the specification or illustration in the drawings it cannot be accurately determined how the grippers and gripper pads are movable relative to the other grippers and grippers pads.

*Due to the lack of proper support in the disclosure, claim 22 cannot be examined relative to the prior art at this time.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ochs (DE 4 233 422). Ochs teaches a gripper device comprising a gripper pad (1) having a first clamping face (9), a gripper (8) having a second clamping face, an inherent first drive for acting on the shaft (6) of the gripper (8) so as to move the gripper into contact with a sheet and the second clamping face, and a second drive (11, 12, 4) for moving the first clamping face (9) perpendicularly to the second clamping face of the gripper (8).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 - 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochs in view of Thunker et al. (US 2002/0063383).

With respect to claim 2, Ochs does not teach a piezo-actuator drive for the second drive. Thunker et al. teach the desirability of using a piezo-actuator drive for a gripper. See paragraph 28 of Thunker et al., for example. It would have been obvious to one of ordinary skill in the art to provide the gripper device of Ochs with a piezo-actuator second drive in view of Thunker et al. so as to more quickly move the gripper pad. Although Thunker only teach a drive for the gripper, the advantages of providing either drive of Ochs with a piezo-actuator is readily apparent.

With respect to claims 3 - 5 and 7 Ochs does not teach fixing the gripper in the closed position. Thunker et al. teach fixing the gripper in the closed position with a self-locking mechanism (intermediate gear). See paragraph 28 of Thunker et al., in particular, the last sentence. It would have been obvious to one of ordinary skill in the art to provide the gripper device of Ochs with a fixable gripper in the closed position in view of Thunker et al. so as prevent bouncing of the gripper. Note that both Ochs and Thunker et al. teach a gripper shift with fixed grippers. With further respect to claim 5 note the rotary drive (5) of Thunker et al. Insofar as applicants motor provides a stoppage torque so would the motor (5) of Thunker et al.

With respect to claims 6 - 8 Ochs does not teach a linear drive. Thunker et al. teach a linear drive (4) and lever (10) for acting on an axis of rotation (3) of the gripper. See Figures 6 and 10 and paragraphs 57 and 58 of Thunker et al. It would have been obvious to one of ordinary skill in the art to provide the gripper device of Ochs with a linear drive in view of Thunker et al. so as to boost the power of the gripper drive. With respect to claims 7 and 8

Art Unit: 2854

insofar as applicants toggle lever locks the gripper so would the toggle lever (10) of Thunker et al. See again Figures 6 and 10 of Thunker et al. (

With respect to claim 16 Ochs does not teach a programmable electronic control for the drives. Thunker et al. teach a programmable electronic control for the gripper. See paragraph 73 of Thunker et al. It would have been obvious to one of ordinary skill in the art to provide the gripper device of Ochs with a programmable electronic control in view of Thunker et al. so as to freely adapt the grippers to different sheet thicknesses and printing speeds, for example.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ochs in view of Thunker et al. as applied to the claims above, and further in view of Lange et al. (US 6,048,297). Neither Ochs or Thunker et al. teach a further drive. Lange et al. teach a further drive (8, 24-26) for varying the position of the gripper shaft (22). See Figure 8 and column 3 lines 31 - 45 of Lange et al. It would have been obvious to one of ordinary skill in the art to provide the gripper device of Ochs, as modified by Thunker et al., with a further drive in view of Lange et al. so as to accommodate different thickness sheets.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochs in view of Thunker et al. as applied to claims 2 - 8 and 16 above, and further in view of Maass et al. (US 5,431,099). Neither Ochs or Thunker et al. teach a sensor. Maass et al. teach a sensor (9) for sensing the clamping force. See column 4 lines 20 - 41 of Maass et al., for example. It would have been obvious to one of ordinary skill in the art to provide the gripper device of Ochs, as modified by Thunker et al., with a sensor in view of Maass et al. so as to control the second drive of Ochs to provide optimum clamping force of the gripper device.

Claims 10, 11, 14, and 15 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 12, 13, 19, and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first or second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 21 and 22 cannot be examined relative to the prior art at this time.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Figure 4 of Dussmann (DE 4 307 712), Figures 13 and 14 of Hirai (JP 11-207926), column 3 line 45+ and Figures 4 - 6 of Raab et al. (US 4,718,340), and the English Abstract of Melzer et al. (DE 3 919 088).

The following is an examiner's statement of reasons for allowability: With respect to claims 10 - 13 the prior art of record does not teach a gripper closing in a plane parallel to the transport plane of the sheets. With respect to claims 14 and 15 the prior art of record does not teach separable first and second drives connected solely to the gripper. With respect to claims 19 and 20 the prior art of record does not teach controlling the second drive to counteract bouncing of the gripper.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

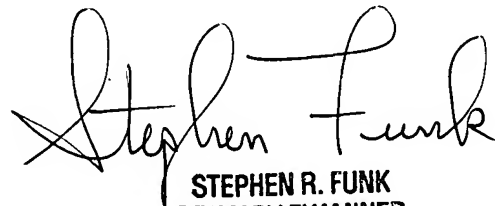
Art Unit: 2854

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen R. Funk whose telephone number is (571) 272-2164.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Hirshfeld, can be reached at (571) 272-2168.

The fax phone number for ALL official papers is (703) 872-9306. Upon consulting with the examiner *unofficial* papers only may be faxed directly to the examiner at (571) 273-2164.

SRF
August 3, 2004



STEPHEN R. FUNK
PRIMARY EXAMINER